



The Aviation Structural Mechanic (AM) maintains all aircraft main and auxiliary hydraulic power systems, actuating subsystems and landing gear. Responsible for maintenance on the aircraft fuselage (mainframe) wings airfoils, and associated fixed and moveable surfaces and flight controls. Aircrew volunteers from this rating perform in-flight duties in various types of aircraft.

These technicians may also volunteer to fly as Naval aircrew. Aircrew performs numerous in-flight duties and operates aircraft systems in turbojet, helicopter, or propeller aircraft. Aircrew earns additional pay for flying. (See the Aircrew Program for details.)

What They Do

- Remove, repair and replace hydraulic system pumps, auxiliary power systems and unit actuating subsystems;
- Maintain aircraft landing gear system, brakes and related pneumatic systems, reservoir pressurization, emergency actuating devices, pumps, valves, regulators, cylinders, lines and fittings;
- Service pressure accumulators, emergency air bottles, oleo struts, reservoirs and master brake cylinders;
- Inspect, removes and replace components of hydraulic systems;
- Replace gaskets, packing, and wipers in hydraulic components;
- Remove, repair and replace aircraft fuselage, wings, fixed and movable surfaces, airfoils, regular seats, wheels and tires, controls and mechanisms; Remove, install and rig aircraft flight control surfaces;
- Fabricate and assemble metal components and make minor repairs to aircraft skin;
- Install rivets and metal fasteners;
- Fabricate repairs for composite components;
- Perform non-destructive dye penetrant inspections (NDI);
- Perform daily, preflight, post flight and other periodic aircraft inspections.

Credit Recommendations

The American Council on Education recommends that semester hour credits be awarded in the vocational certificate or lower-division bachelor's/associate's degree categories for airframe structure repair courses taken in this rating.

Career Path After Recruit Training

Enlistees are taught the fundamentals of this rating through on-the-job training or formal Navy schooling. Operational training is available in this rating during later stages of career development.

School	Present Location	Approximate Training Time	Subjects	Training Methods
Class "A" Technical School	Pensacola, FL	Approximately 9 Weeks	Basic aviation structural mechanic course, basic aviation theory course, and skills required for specialized AM rating	Group instruction, classroom and shop. After completion of Core "A" school, AMs attend either a one-week Intermediate Level maintenance school or a three-week Organizational Level maintenance school
AMs may be assigned to aviation squadrons, aircraft carriers or to other Navy ships carrying aircraft, to naval air stations or other aviation shore facilities in the United States or overseas. Normally, each time AMs are assigned to units with new equipment, they return to school for specialized training. During a 20-year period, AMs spend about 50 percent of their time assigned to fleet units and 50 percent to shore stations				

Qualifications and Interests

Aviation structural mechanics require an orientation toward tools and equipment should possess manual dexterity and be physically fit. They must be able to keep records, have a knack for getting along well with other people and work as part of a team.

The ability to do repetitive tasks and perform detailed work is also helpful. **Normal hearing and normal color and depth perception are required.**

Working Environment

Aviation structural mechanics may be assigned to sea or shore duty any place in the world, so their working environment varies considerably. They may work in hangars or hangar decks, or outside on flight decks or flight lines at air stations. A high noise level is a normal part of their work environment. AM's work closely with others, do mostly physical work and require little supervision. AM's may also serve as flight engineers aboard certain aircraft.

Opportunities

Excellent opportunities exist for qualified applicants to enter this rating. Approximately 8,000 men and women currently work in this rating.

Civilian Occupational Equivalents

To see Related Civilian Occupations for this rating:

AM - <https://www.cool.navy.mil/enlisted/am.htm>

For more information on opportunities available for this rating, please visit Navy Credentialing Opportunities On-Line (COOL) at <https://www.cool.navy.mil/index.htm>

Since Navy programs and courses are revised at times, the information contained on this rating card is subject to change.

(Revised 10/12)